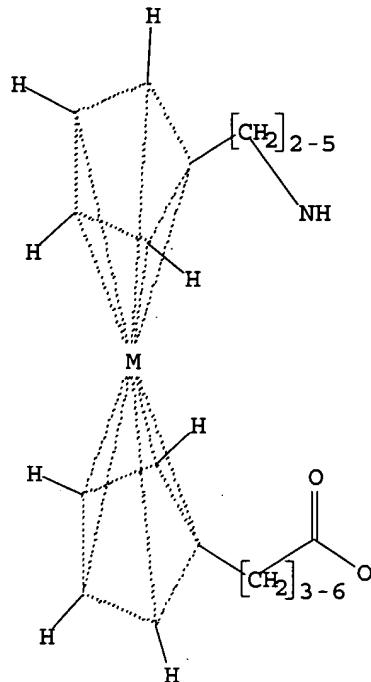


10/501,347

(FILE 'HOME' ENTERED AT 16:24:35 ON 22 MAR 2007)

FILE 'REGISTRY' ENTERED AT 16:24:50 ON 22 MAR 2007
L1 STRUCTURE UPLOADED

=> d 11
L1 HAS NO ANSWERS
L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 11
SAMPLE SEARCH INITIATED 16:25:37 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 210 TO ITERATE

100.0% PROCESSED 210 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 3331 TO 5069
PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> s 11 full
FULL SEARCH INITIATED 16:25:46 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 4314 TO ITERATE

100.0% PROCESSED 4314 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

L3 0 SEA SSS FUL L1

(FILE 'HOME' ENTERED AT 16:24:35 ON 22 MAR 2007)

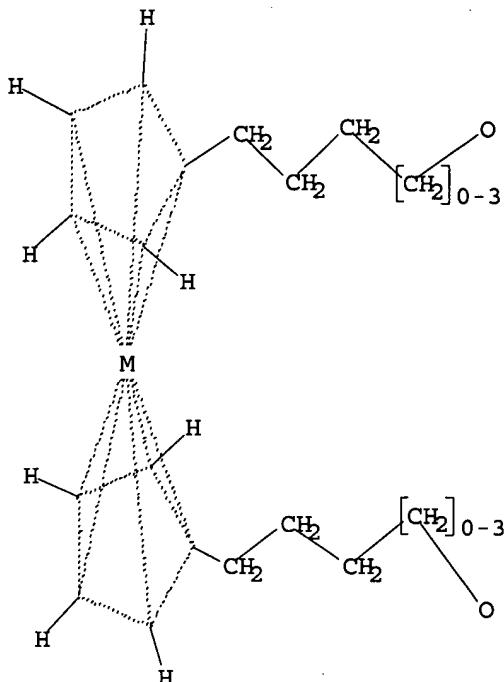
FILE 'REGISTRY' ENTERED AT 16:24:50 ON 22 MAR 2007

L1 STRUCTURE UPLOADED
L2 0 S L1
L3 0 S L1 FULL
L4 STRUCTURE UPLOADED

=> d 14

L4 HAS NO ANSWERS

L4 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 14

SAMPLE SEARCH INITIATED 16:27:45 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 1984 TO ITERATE

100.0% PROCESSED 1984 ITERATIONS
SEARCH TIME: 00.00.01

1 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
 BATCH **COMPLETE**
PROJECTED ITERATIONS: 37009 TO 42351
PROJECTED ANSWERS: 1 TO 80

L5 1 SEA SSS SAM L4

=> s 14 full

FULL SEARCH INITIATED 16:27:52 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 38592 TO ITERATE

100.0% PROCESSED 38592 ITERATIONS
SEARCH TIME: 00.00.01

39 ANSWERS

L6 39 SEA SSS FUL L4

=> fil caplus
COST IN U.S. DOLLARS
FULL ESTIMATED COST

	SINCE FILE ENTRY	TOTAL SESSION
	345.55	345.76

FILE 'CAPLUS' ENTERED AT 16:27:58 ON 22 MAR 2007
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FILE COVERS 1907 - 22 Mar 2007 VOL 146 ISS 13
FILE LAST UPDATED: 21 Mar 2007 (20070321/ED)

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<http://www.cas.org/infopolicy.html>

=> s 16
L7 34 L6

=> s 17 and py<=2002
22870120 PY<=2002
L8 23 L7 AND PY<=2002

=> d 1-23 bib abs

L8 ANSWER 1 OF 23 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2006:601531 CAPLUS
DN 145:63358
TI Supported metallocene catalyst and olefin polymerization therewith
IN Lee, Bun-Yeoul; Oh, Jae-Seung; Lee, Joo-Eun; Lee, Do-Hoon
PA S. Korea
SO U.S. Pat. Appl. Publ., 19 pp., Cont.-in-part of U.S. Ser. No. 666,618.
CODEN: USXXCO

DT Patent
LA English
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2006135351	A1	20060622	US 2005-289623	20051130
	KR 2001003325	A	20010115	KR 1999-23575	19990622 <-
	US 2004058804	A1	20040325	US 2003-666618	20030918
	US 7041618	B2	20060509		
PRAI	KR 1999-23575	A	19990622		
	US 2000-526035	B2	20000315		
	US 2003-666618	A2	20030918		

OS MARPAT 145:63358
AB The present invention relates to a metallocene compound having a functional group that facilitates the preparation of the supported metallocene catalyst for olefin polymerization and the olefin polymerization process using the same. The

metallocene compds. in this invention are strongly supported on the inorg. support due to the strong chemical bond of the ligand of the metallocene compound with the silica surface, which leads to minimize leaching of the catalyst during the activation process. Therefore, the supported catalyst of this invention allows the olefin polymerization process to proceed without

any

fouling in the reactor with a slurry or a gas phase process, and the morphol. and bulk d. of the polymer produced are much better defined than those produced by conventional methods.

L8 ANSWER 2 OF 23 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2004:252167 CAPLUS
DN 140:254074
TI Supported metallocene catalyst for olefin polymerization
IN Lee, Bun-yeoul; Oh, Jae-seung; Lee, Joo-eun; Lee, Do-hoon
PA Lg Chemical Ltd., S. Korea
SO U.S. Pat. Appl. Publ., 24 pp., Cont.-in-part of U.S. Ser. No. 526,035.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2004058804	A1	20040325	US 2003-666618	20030918
	US 7041618	B2	20060509		
	KR 2001003325	A	20010115	KR 1999-23575	19990622 <-
	US 2006135351	A1	20060622	US 2005-289623	20051130
PRAI	KR 1999-23575	A	19990622		
	US 2000-526035	A2	20000315		
	US 2003-666618	A2	20030918		

OS MARPAT 140:254074
AB The title catalyst has a functional group that facilitates the preparation of the supported metallocene catalyst, and utilizes a reaction of the functional group of a ligand such as acetal, ketal, tertiary alkoxyalkyl, benzyloxyalkyl, substituted benzyloxyalkyl, monothioacetal, or monothioketal with highly reactive silica dehydroxylated at > 600°. The metallocene compds. are strongly supported on the inorg. support due to the strong chemical bond of the ligand of the metallocene compound with the silica surface, which leads to minimized leaching of the catalyst during the activation process. The supported catalyst allows the olefin polymerization process to proceed without any fouling in the reactor with a slurry or a gas phase process, and the morphol. and bulk d. of the polymer produced are much better defined than those produced by conventional methods.

L8 ANSWER 3 OF 23 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2003:590693 CAPLUS
DN 139:129086
TI Methods for sequencing nucleic acids using probes containing transition metal complexes
IN Blackburn, Gary; Kayyem, Jon Faiz; Tao, Chunlin; Yu, Changjun
PA USA
SO U.S. Pat. Appl. Publ., 83 pp., Cont.-in-part of U.S. Ser. No. 116,726, abandoned.

CODEN: USXXCO
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003143556	A1	20030731	US 2002-137710	20020430
	CA 2444186	A1	20021003	CA 2002-2444186	20020403 <-
	WO 2003085082	A2	20031016	WO 2002-US20370	20020403
	WO 2003085082	A3	20050310		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
 CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
 GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
 PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA,
 UG, UZ, VN, YU, ZA, ZM, ZW
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
 KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB,
 GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA,
 GN, GQ, GW, ML, MR, NE, SN, TD, TG
 AU 2002367849 A1 20031020 AU 2002-367849 20020403
 EP 1527194 A2 20050504 EP 2002-806823 20020403
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, FI, CY, TR
 JP 2005519630 T 20050707 JP 2003-582261 20020403
 US 2003232354 A1 20031218 US 2003-336225 20030102
 WO 2003093429 A2 20031113 WO 2003-US13665 20030430
 WO 2003093429 A3 20040729
 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
 CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
 GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
 PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT,
 TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
 KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
 FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
 AU 2003228806 A1 20031117 AU 2003-228806 20030430
 PRAI US 2001-281276P P 20010403
 US 2002-116726 B2 20020403
 US 2000-626096 A1 20000726
 WO 2002-US20370 W 20020403
 US 2002-137710 A 20020430
 WO 2003-US13665 W 20030430
 AB The present invention is directed to methods and compns. for the use of
 electron transfer moieties with different redox potentials to
 electronically detect nucleic acids, particularly for the electrochem.
 sequencing of DNA. Preparation of ferrocene derivs. with multiple redox
 potentials is described.
 L8 ANSWER 4 OF 23 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2002:906249 CAPLUS
 DN 138:4862
 TI Supported polymerization catalyst using a catalyst precursor having
 functional group and surface modified carrier and olefin polymerization
 using the same
 IN Shin, Sang-Young; Lee, Choong-Hoon; Lee, Eun-Jung; Oh, Jae-Seung
 PA LG Chem, Ltd., S. Korea
 SO PCT Int. Appl., 46 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002094841	A1	20021128	WO 2002-KR979	20020523 <--
	W: CN, JP, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
	KR 2002090447	A	20021205	KR 2001-28995	20010525 <--
	EP 1390374	A1	20040225	EP 2002-730961	20020523
	EP 1390374	B1	20060301		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				

IE, FI, CY, TR				
JP 2004520476	T	20040708	JP 2002-591514	20020523
AT 318830	T	20060315	AT 2002-730961	20020523
ES 2254681	T3	20060616	ES 2002-2730961	20020523
US 2003166455	A1	20030904	US 2002-297816	20021210
US 6908877	B2	20050621		
PRAI KR 2001-28995	A	20010525		
WO 2002-KR979	W	20020523		

AB A supported metallocene catalyst useful for polymerization of olefins is manufactured

by treating a metallocene compound substantially having acetal, ketal, secondary or tertiary alkoxy alkyl, benzyloxyalkyl, substituted benzyloxy alkyl, aryloxyalkyl, dithioacetal, dithioketal, monothioacetal, monothioketal, thioether or alkoxy silane functional group on a part of its ligand with a silane-treated dehydrated silica carrier. Thus, 1.0 g of hexamethyldisilazane-treated silica in 40 mL hexane was mixed with 200 mg [tert-butyl-O-(CH₂)₆C₅H₄]₂ZrCl₂ in 10 mL hexane at 85° for 3 h to give a supported catalyst, which (100 mg) was mixed with methylaluminoxane and triethylaluminum to give a catalyst used in the polymerization of ethylene

to

give 115 g polyethylene, compared with 90 g using a catalyst with silica carrier without hexamethyldisilazane treatment.

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 5 OF 23 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2002:678433 CAPLUS
DN 138:122308
TI Hydrogenation of olefins catalyzed by highly active titanocene/NaH or n-BuLi catalyst systems
AU Sun, Qi; Sun, Ren-An
CS Department of Chemistry, Liaoning Normal University, Dalian, 116029, Peop. Rep. China
SO Chemical Research in Chinese Universities (2002), 18(3), 307-310
CODEN: CRCUED; ISSN: 1005-9040
PB Higher Education Press
DT Journal
LA English
AB The effects of the substituents on the cyclopentadienyl ring and the reducing agents on the catalytic activity and the stability of titanocene/NaH or BuLi systems for the hydrogenation of olefins were studied. For the catalyst systems composed of titanocene/NaH or BuLi, the nature and the number of the substituents on the cyclopentadienyl ring control the catalytic behavior of those two systems. The effect of the reducing agent on the catalytic activity is relatively small. The characters of the hydrogenation of various olefins catalyzed resp. by Cp₂TiCl₂/NaH or BuLi systems were compared.

RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 6 OF 23 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2000:911315 CAPLUS
DN 134:72040
TI Supported metallocene catalyst for olefin polymerization
IN Oh, Jae-Seung; Lee, Bun-Yeoul; Lee, Joo-Eun; Lee, Do-Hoon
PA LG Chemical Ltd., S. Korea
SO PCT Int. Appl., 43 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 3

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	-----	-----	-----	-----
PI WO 2000078827	A1	20001228	WO 2000-KR189	20000309 <--

W: AU, CA, CN, JP
 RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
 PT, SE
 KR 2001003325 A 20010115 KR 1999-23575 19990622 <--
 CA 2340713 A1 20001228 CA 2000-2340713 20000309 <--
 EP 1196459 A1 20020417 EP 2000-911437 20000309 <--
 EP 1196459 B1 20040825
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, FI
 JP 2003502492 T 20030121 JP 2001-505584 20000309
 JP 3592672 B2 20041124
 AU 767633 B2 20031120 AU 2000-33311 20000309
 AT 274534 T 20040915 AT 2000-911437 20000309
 ES 2223476 T3 20050301 ES 2000-911437 20000309
 PRAI KR 1999-23575 A 19990622
 WO 2000-KR189 W 20000309

OS MARPAT 134:72040

AB The title catalyst has a functional group that facilitates the preparation of the supported metallocene catalyst, and utilizes a reaction of the functional group of a ligand such as acetal, ketal, tertiary alkoxyalkyl, benzyloxyalkyl, substituted benzyloxyalkyl, monothioacetal, or monothioketal with highly reactive silica dehydroxylated at > 600°. The metallocene compds. are strongly supported on the inorg. support due to the strong chemical bond of the ligand of the metallocene compound with the silica surface, which leads to minimized leaching of the catalyst during the activation process. The supported catalyst allows the olefin polymerization

process to proceed without any fouling in the reactor with a slurry or a gas phase process, and the morphol. and bulk d. of the polymer produced are much better defined than those produced by conventional methods.

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 7 OF 23 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2000:628188 CAPLUS

DN 133:223183

TI Metallocene compounds and their use for olefin polymerization

IN Oh, Jae-seung; Lee, Bun-yeoul; Lee, Joo-eun; Lee, Do-hoon

PA Lg Chemical Ltd., S. Korea

SO PCT Int. Appl., 37 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000052063	A1	20000908	WO 2000-KR167	20000303 <--
	W: AU, CA, CN, JP, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	KR 2000062706	A	20001025	KR 2000-10348	20000302 <--
	CA 2364011	A1	20000908	CA 2000-2364011	20000303 <--
	CA 2364011	C	20070220		
	EP 1214357	A1	20020619	EP 2000-908088	20000303 <--
	EP 1214357	B1	20030820		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY				
	JP 2002538237	T	20021112	JP 2000-602285	20000303 <--
	JP 3547710	B2	20040728		
	AT 247675	T	20030915	AT 2000-908088	20000303
	ES 2199783	T3	20040301	ES 2000-908088	20000303
	AU 772271	B2	20040422	AU 2000-29464	20000303
	US 6506919	B1	20030114	US 2001-914717	20010831
	PRAI KR 1999-6955	A	19990303		

KR 2000-10348 A 20000302
 WO 2000-KR167 W 20000303
 OS MARPAT 133:223183
 AB A metallocene compound and supported catalysts are easily prepared by the reaction of the Group 4 metal-containing (CR₁₂)_aOSiRbYc ligand (Y = H, halogen, alkoxy, aryloxy, amide, or silyloxy radical, R₁ = H, or an alkyl, cycloalkyl, aryl, alkenyl, alkylaryl, arylalkyl, or arylalkenyl radical having 1-40 C atoms; R = alkyl, cycloalkyl, aryl, alkenyl, alkylaryl, arylalkyl, or arylalkenyl radical having 1-40 C atoms, a = 1-40, c = 1, 2, or 3, and the sum of b and c = 3) with a support. The olefin polymerization process employing the supported catalyst proceeds without fouling in the reactor, and the morphol. and bulk d. of the polymer are better than by the conventional method.

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 8 OF 23 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2000:573846 CAPLUS
 DN 133:177638
 TI Method for olefin polymerization with recycling of co-catalyst
 IN Lee, Bun-yeoul; Oh, Jae-seung; Oum, Yoon-hyeun; Park, Tai-ho
 PA LG Chemical Ltd., S. Korea
 SO PCT Int. Appl., 45 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000047635	A1	20000817	WO 2000-KR68	20000128 <--
W: AU, CA, CN, JP				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
KR 2000052586	A	20000825	KR 1999-62906	19991227 <--
CA 2326343	A1	20000817	CA 2000-2326343	20000128 <--
EP 1082357	A1	20010314	EP 2000-902186	20000128 <--
EP 1082357	B1	20041117		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002536510	T	20021029	JP 2000-598550	20000128 <--
AU 771870	B2	20040401	AU 2000-23305	20000128
AT 282643	T	20041215	AT 2000-902186	20000128
ES 2226776	T3	20050401	ES 2000-902186	20000128
US 6340728	B1	20020122	US 2000-494711	20000131 <--

PRAI KR 1999-3027 A 19990130
 KR 1999-62906 A 19991227
 WO 2000-KR68 W 20000128

OS MARPAT 133:177638
 AB The present invention relates to a catalyst preparation process and an olefin polymerization process with the recycling of co-catalyst, particularly to a method of recycling co-catalyst for the activation of single-site pre-catalyst in the olefin polymerization. This invention, therefore, provides an olefin polymerization process that can reuse expensive co-catalyst for subsequent olefin polymerization so that the total amount of co-catalyst required can be significantly reduced. This invention provides an olefin polymerization process which comprises the steps of: (a) preparing activated single-site catalysts by contacting (i) supported single-site pre-catalyst with (ii) an organic solvent containing co-catalysts; (b) separating activated single-site catalysts of step (a) from co-catalysts dissolved in an organic solvent; (c) olefin polymerization using the separated single-site catalysts of step (b) with one or more

olefinic monomers; and (d) reusing the separated co-catalysts of step (b) by recycling an organic solvent containing the separated co-catalysts and contacting

them with the supported single-site pre-catalysts of step (a).

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 9 OF 23 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2000:239078 CAPLUS
DN 133:17861
TI Preparation of Anchored Metallocene Complexes on Dehydroxylated Silica and Their Use in the Polymerization of Ethylene
AU Lee, Bun Yeoul; Oh, Jae Seung
CS LG Chemical Ltd./Research Park, Yusung-gu, Taejon, 305-380, S. Korea
SO Macromolecules (2000), 33(9), 3194-3195
CODEN: MAMOBX; ISSN: 0024-9297
PB American Chemical Society
DT Journal
LA English
AB Seven zirconocene complexes having acetal, ketal, or tert-Bu ether groups as a substituent on the cyclopentadienyl ring were synthesized from 6-chlorohexanol. These zirconocene complexes were anchored by reaction with dehydroxylated SiO₂ in hexane at 85° for 3 h. The catalytic activities of anchored zirconocenes were evaluated by ethylene polymerization under methylaluminoxane activation. Mol. weight (MW), MW distribution, bulk d., polymer particle size distribution, and morphol. of the obtained polymers were determined

RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 10 OF 23 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1999:8534 CAPLUS
DN 130:139440
TI Preparation, Properties, and Reactions of Metal-Containing Heterocycles. Part 98. Synthesis, Structure, and Electrochemistry of Osmametallocenophanes with Different Ring Size
AU Lindner, Ekkehard; Krebs, Ilmari; Fawzi, Riad; Steimann, Manfred; Speiser, Bernd
CS Institut fuer Anorganische Chemie, Universitaet Tuebingen, Tuebingen, D-72076, Germany
SO Organometallics (1999), 18(4), 480-489
CODEN: ORGND7; ISSN: 0276-7333
PB American Chemical Society
DT Journal
LA English
OS CASREACT 130:139440
AB The reaction of the bis(triflates) [η₅-C₅H₄(CH₂)nOTf]₂M [n = 3, M = Fe (4a), Ru (5a); n = 4, M = Fe (4b), Ru (5b); n = 6, M = Fe (4c), Ru (5c)], which were obtained from the bis(alcs.) [η₅-C₅H₄(CH₂)nOH]₂M (2a-c, 3a-c) and (CF₃SO₂)₂O in the presence of pyridine, with Na₂[Os(CO)₄] in di-Me ether gave the novel osmametallocenophanes [η₅-C₅H₄(CH₂)nOs(CO)₄(CH₂)nC₅H₄-η₅]M (6a-c, 7a-c). The structures of 6b (n = 4, M = Fe) and 7c (n = 6, M = Ru) were studied by x-ray structural analyses. In a similar way the bis(rhenium) complexes [η₅-C₅H₄(CH₂)nRe(CO)₅]₂M (8a-c, 9a-c) were made accessible from the bis(triflates) 4a-c and 5a-c and Na[Re(CO)₅] in THF. The dependence of the redox behavior of the metallocene unit in the osmametallocenophanes 6a-c and 7b,c on the metal-metal distance was examined by cyclic voltammetry. The obtained results were compared with those of the bis(alcs.) 2a-c and 3a-c and the bis(rhenium) complexes 8a-c and 9a-c. The ferrocenes were characterized by a reversible 1-electron oxidation, whereas the ruthenocenes feature an irreversible two-electron process accompanied by a chemical reaction. A consistent through-space effect of the spacer-bound substituents on the redox potential is observed in the case of

the ferrocenes.

RE.CNT 89 THERE ARE 89 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 11 OF 23 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1998:348238 CAPLUS
DN 129:41447
TI Novel liquid-crystalline titanocene complexes with catalytic activity for polymerizations of acetylene and phenylacetylene
AU Piao, G.; Goto, H.; Akagi, K.; Shirakawa, H.
CS Institute of Materials Science, University of Tsukuba, Tsukuba, 305-8573, Japan
SO Polymer (1998), 39(15), 3559-3564
CODEN: POLMAG; ISSN: 0032-3861
PB Elsevier Science Ltd.
DT Journal
LA English
AB We have synthesized a series of novel titanocene complexes with liquid-crystalline (LC) groups as coordination ligands, with the ultimate aim of developing LC catalytic species available for anisotropic polymers. of acetylenes. The titanocene complexes were prepared by introducing LC groups into cyclopentadienyl ligands as substituents, (PCH₅06Cp)₂TiCl₂ (I), or coordinating them to a titanium atom as sym. and asym. ligands, Cp₂Ti(PCH₅06)₂ (II) and Cp₂Ti(PCH₅06)Cl (III) [where Cp = cyclopentadienyl, PCH₅06 = p-(trans-4-n-pentylcyclohexyl)phenoxyhexyl and PCH₅06 = p-(trans-4-n-pentylcyclohexyl)phenoxyhexyloxy]. Polarizing optical microscope observations and differential scanning calorimetry measurements indicated that the titanocene complexes II and III are the first titanium complexes exhibiting LC behavior. The titanocene complexes I and II can polymerize phenylacetylenes to give poly(phenylacetylene)s with the aid of triethylaluminum (Et₃Al) as cocatalyst. The mol. wts. and ds.p. of the poly(phenylacetylene)s prepared were comparable or superior to those prepared with titanocene dichloride and tetra-n-butoxytitanium [Ti(O-n-Bu)₄] catalysts. The LC titanocene complexes II and III were also confirmed to have catalytic activities for the polymerization of acetylene.

ESR spectra of the catalyst systems gave signals of trivalent titanium (Ti³⁺) with no hyperfine structure, suggesting that the catalytically active species is a mononuclear complex consisting of Ti³⁺ rather than a binuclear or trinuclear one.

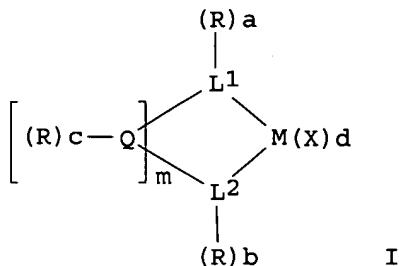
RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 12 OF 23 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1998:304150 CAPLUS
DN 128:322092
TI Metallocene catalyst systems for polymerization of α -olefins
IN Sancho Royo, Jose; Hidalgo Llinas, Gerardo; Munoz-Escalona Lafuente, Antonio; Martinez Nunez, Francisca; Martin, Marcos Carlos; Lafuente Canas, Pilar; Pena Garcia, Begona
PA Repsol Quimica S.A., Spain
SO Eur. Pat. Appl., 15 pp.
CODEN: EPXXDW

DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 839836	A1	19980506	EP 1997-500187	19971031 <--
EP 839836	B1	20001220		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
NO 9705049	A	19980504	NO 1997-5049	19971031 <--

NO 318716	B1 20050502	JP 1997-336255	19971031 <--
JP 10226709	A 19980825	AT 1997-500187	19971031 <--
AT 198210	T 20010115	ES 1997-500187	19971031 <--
ES 2154017	T3 20010316	PT 1997-500187	19971031 <--
PT 839836	T 20010629	US 1997-961956	19971031 <--
US 2003195109	A1 20031016	US 2004-893754	20040716
US 2005065019	A1 20050324		
PRAI ES 1996-2310	A 19961031		
US 1997-961956	B3 19971031		
OS MARPAT 128:322092			
GI			



AB The catalyst systems, contain $(LRa)_xMXy$ or I ($R = H, C1-20$ radical optionally containing heteroatoms of Groups 14-16 of the periodic table of the elements and B; ≥ 1 group of R contains a group of OSiR₂₃; Q = B or an element from Groups 14-16 of the periodic table; m = 1-4, preferably 1 or 2; L, L₁, L₂ = cyclic organic group united to M through a π bond, or atom of Groups 15 or 16 of the periodic table; M = metal of Groups 3, 4, 10 of the periodic table, lanthanide or actinide; X = halo, H, OR₃, NR₃₂, C₁₋₂₀ alkyl, C₆₋₂₀ aryl; R₂, R₃ = C₁₋₂₀ alkyl, C₃₋₂₀ cycloalkyl, C₆₋₂₀ aryl, etc.; x = 1, 2; y = 2, 3; x + y = 4; d = 0-2; a, b, c = 0-10; a + b + c ≥ 1). Thus, polymerization of ethylene in the presence of methylaluminoxanes and silica-supported [cyclopentadienyl(3-trimethylsiloxypropyl)cyclopentadienyl]zirconium dichloride gave a polymer with catalyst activity 1.4 + 105 g polymer/mol Zr·h·atmospheric

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

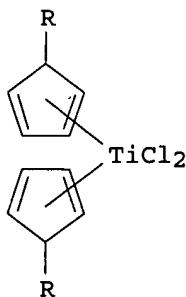
L8 ANSWER 13 OF 23 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1998:210446 CAPLUS
DN 128:308781
TI Ethylene polymerization by zirconocene compounds having ether bonds
AU Lee, Bun Yeoul; Oh, Jae Seung
CS Research Park, LG Chemical, Taejon, 305-380, S. Korea
SO Journal of Organometallic Chemistry (1998), 552(1-2), 313-317
CODEN: JORCAI; ISSN: 0022-328X
PB Elsevier Science S.A.
DT Journal
LA English
AB Zirconocene compds. having ether bonds at the substituent of cyclopentadienyl ligand, $[\eta^5-C_5H_4(CH_2)_nOCH_2CH_2OCH_2CH_3]_2ZrCl_2$ ($n=2, 4, 6, 8$) and $[\eta^5-C_5H_4CH_2CH_2OCH_2CH_3]_2ZrCl_2$, were prepared and tested as polymerization catalysts for ethylene with methylaluminoxane as a cocatalyst. The presence of oxygen atom close to the metal center drastically reduced the polymerization activity. The polymerization activity increased as the distance between zirconium and oxygen atom increased and showed a maximum when n was 6.
RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 14 OF 23 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 1997:370191 CAPLUS
 DN 127:81812
 TI Liquid crystalline titanocene with catalytic activity for polymerizations of acetylene derivatives
 AU Akagi, K.; Goto, H.; Bannai, H.; Piao, G.; Shirakawa, H.
 CS Inst. Materials Science, Univ. Tsukuba, Ibaraki, 305, Japan
 SO Synthetic Metals (1997), 86(1-3), 1879-1880
 CODEN: SYMEDZ; ISSN: 0379-6779
 PB Elsevier
 DT Journal
 LA English
 AB Two kinds of liquid crystalline (LC) titanocenes have been synthesized with an aim to construct a new type of anisotropic polymerization field. The titanocene derivs. were prepared by introducing LC groups into cyclopentadienyl ligands as substituents, (PCH₅06Cp)₂TiCl₂ (I) or coordinating them to titanium atom as ligands, Cp₂Ti(PCH₅06)₂ (II). Observations of polarizing optical microscope and measurements of DSC indicated that II is the first titanium complex exhibiting a thermotropic LC phase. We found that both the titanocene derivs. can polymerize phenylacetylenes to give poly(phenylacetylene)s with an aid of triethylaluminum used as a cocatalyst. Mol. wts. and polymerization degrees of the polymers were comparable or superior to those by catalysts such as a titanocene dichloride [Cp₂TiCl₂] and a tetra-n-butoxytitanium [Ti(O-n-Bu)₄]. The LC titanocene derivative II was also confirmed to have a high catalytic activity for acetylene polymerization. These results should shed light on development of novel anisotropic reaction field available for syntheses of directly aligned conducting polymers.

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 15 OF 23 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 1997:34660 CAPLUS
 DN 126:185774
 TI Highly active catalyst systems composed of titanocene/NaH or n-BuLi for the olefin hydrogenation
 AU Sun, Qi; Liao, Shijian; Xu, Yun; Qian, Yanlong; Huang, Jiling
 CS Dalian Inst. Chem. Physics, Chinese Academy of Sci., Dalian, 116023, Peop. Rep. China
 SO Cuihua Xuebao (1996), 17(6), 495-496
 CODEN: THHPD3; ISSN: 0253-9837
 PB Kexue
 DT Journal
 LA English
 GI



AB Reducing titanocene dichloride (I; R = H) with NaH or BuLi yielded a system which catalyzed 1-hexene hydrogenation with maximum turnover frequencies of 57 and 44 s⁻¹, resp. I (R = CHetCH:CHMe-trans) in these systems showed maximum turnovers of 5900 and 8600, resp.

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD.
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 16 OF 23 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1996:656742 CAPLUS
DN 125:328975
TI New substituted titanocene, zirconocene and hafnocene dichlorides
AU Qian, Yanlong; Huang, Jiling; Huang, Taishen; Chen, Shoushan
CS Lab. Organometallic Chem., East China Univ. Sci. Technol., Shanghai, 200237, Peop. Rep. China
SO Transition Metal Chemistry (London) (1996), 21(5), 393-397
CODEN: TMCHDN; ISSN: 0340-4285
PB Chapman & Hall
DT Journal
LA English
AB Twenty-two new substituted metallocene Cp1Cp2MC12 (M = Ti, Zr or Hf, Cp1, Cp2 = substituted cyclopentadienyl) were prepared and the catalytic activity of some of them in alkene polymerization was evaluated.

L8 ANSWER 17 OF 23 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1995:956900 CAPLUS
DN 124:146371
TI Mass spectrometry of derivatives of dicyclopentadienyltitanium dichloride. II. Comparison of chemical ionization and liquid secondary ion mass spectrometric behavior
AU Wang, Fu; Fang, Ming; Wu, Wannian; Chen, Xuehua; Huang, Jielin
CS Res. Cent., Hong Kong Univ. Sci. Technol., Clearwater Bay, Hong Kong
SO Rapid Communications in Mass Spectrometry (1995), 9(14), 1362-5
CODEN: RCMSEF; ISSN: 0951-4198
PB Wiley
DT Journal
LA English
AB Pos./neg. chemical ionization (PI/NI CI) and liquid secondary ion mass spectrometry (LSIMS) of ten derivs. of dicyclopentadienyltitanium(IV) dichloride were investigated. The major ions detected were [M + NJH4]⁺, [M - Cl]⁺, [M - 2Cl]⁺, [M - R1CpR3]⁺ and [M - R2CpR4]⁺ in PICI (ammonia) mass spectra, M-, [M + Cl]⁻, [M - Cl]⁻, [M + Cl - R1CpR3]⁻ and [M + Cl - R2CpR4]⁻ in NICI (ammonia) mass spectra, and [M - Cl]⁺, [M - 2Cl]⁺, [M - 2Cl + (NBA - H)]⁺ (where NBA = m-nitrobenzyl alc.), [M - R1CpR3]⁺, [M - R2CpR4]⁺, [M - R1CpR3 - HCl]⁺ and [M - R2CpR4 - HCl]⁺ (where R1CpR3 and R2CpR4 are both mixed alkyl-aryl substituted cyclopentadienyl groups) in LSIMS. Although the mass spectrometric behaviors are quite different due to the different ionization mode, adduct ions were observed in all mass spectra and mol. ions were only observed in NICI mass spectra. The cleavage pathways were confirmed using tandem mass spectrometry methods.

L8 ANSWER 18 OF 23 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1995:930842 CAPLUS
DN 123:341160
TI New ferrocene-containing copolyesters
AU Wilbert, Goetz; Wiesemann, Amadeus; Zentel, Rudolf
CS Inst. Org. chem., Univ. Mainz, Mainz, D-55099, Germany
SO Macromolecular Chemistry and Physics (1995), 196(11), 3771-88
CODEN: MCHPES; ISSN: 1022-1352
PB Huethig & Wepf
DT Journal
LA English
AB We have synthesized four new ferrocene monomers (three diols and one diester). The redox potential of these ferrocene derivs. varies between 0

mV and 230 mV due to different degrees of ring alkylation. Amorphous and liquid crystalline copolyesters were prepared with these monomers in the polymer

main chain. Cyclovoltammetric measurements show that the redox potential of the ferrocene units is increased by about 40 mV upon polymer formation (esterification). Since the ester group is 4 to 6 σ-bonds away from the ferrocene unit this increase is probably caused by some charge-transfer interaction through space. First rheol. measurements show an unusual rubber-like behavior of the ferrocene-containing copolyesters.

L8 ANSWER 19 OF 23 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1995:903964 CAPLUS
DN 124:117483
TI Mass spectrometry of derivatives of dicyclopentadienyltitanium dichloride. I. Behavior in electron impact ionization mass spectrometry
AU Wang, Fu; Fang, Ming; Wu, Wannian; Chen, Xuehua; Huang, Jielin
CS Res. Cent., Hong Kong Univ. Sci. Technol., Clearwater Bay, Hong Kong
SO Rapid Communications in Mass Spectrometry (1995), 9(13), 1266-9
CODEN: RCMSEF; ISSN: 0951-4198
PB Wiley
DT Journal
LA English
AB Electron impact (EI) mass spectra of ten derivs. of dicyclopentadienyltitanium (IV) dichloride, e.g., (C₅H₅)₂C₅H₄CHMeCH₂OMe)TiCl₂, were studied. Fragmentation pathways were constructed and confirmed using daughter-ion, parent-ion and neutral-species loss scan modes of MS.

L8 ANSWER 20 OF 23 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1995:232558 CAPLUS
DN 122:187746
TI Ether- and amine-substituted cyclopentadienes as ligands in organometallic compounds: examples for iron and barium
AU Rees, William S. Jr.; Lay, Uwe W.; Dippel, Kerstin A.
CS Department of Chemistry and Materials Research and Technology Center, The Florida State University, Tallahassee, FL, 32306-3006, USA
SO Journal of Organometallic Chemistry (1994), 483(1-2), 27-31
CODEN: JORCAI; ISSN: 0022-328X
PB Elsevier
DT Journal
LA English
AB Cyclopentadienes with Lewis donor atoms in side chains C₅H₅CH₂CH₂R (R = OMe, OEt, CH₂OEt, NMe₂, OCH₂CH₂OMe) are described. After deprotonation, these compds. can be used as ligands in Main Group and transition element chemical, as shown by the examples of bariocenes and ferrocenes. ¹³C-NMR evidence for the Lewis base stabilization of Ba(C₅H₄CH₂CH₂OMe)₂ is presented. The compds. [parent cyclopentadiene for R = OCH₂CH₂OMe; Ba(C₅H₄CH₂CH₂OMe)₂; Fe(C₅H₄CH₂CH₂R)₂ for all R] are characterized by ¹H- and ¹³C{¹H}-NMR, IR, MS and elemental anal.

L8 ANSWER 21 OF 23 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1993:560448 CAPLUS
DN 119:160448
TI Synthesis of (3-methoxypropyl)cyclopentadienyltitanium and -zirconium complexes
AU Qian, Yanlong; Li, Guisheng
CS Shanghai Inst. Org. Chem., Acad. Sin., Shanghai, 200032, Peop. Rep. China
SO Polyhedron (1993), 12(8), 967-70
CODEN: PLYHDE; ISSN: 0277-5387
DT Journal
LA English
OS CASREACT 119:160448
AB Four titanium and zirconium complexes of (3-methoxypropyl)cyclopentadienyl, Cp'2MC₂Cl₂ (M = Ti, Zr), Cp'CpTiCl₂ and Cp'Cp''TiCl₂ (Cp = C₅H₅, Cp' =

MeOCH2CH2CH2C5H4, Cp'' = MeOCH2CH2C5H4), have been synthesized in good yields by reacting the potassium salt Cp'K with MC14 (M = Ti, Zr), CpTiCl3 and Cp''TiCl3, resp. Their IR spectra show that the oxygen atom in the side-chain does not coordinate with the central metals, while mass spectra imply the coordination of oxygen with the metals is possible, in particular in some low-valent species.

L8 ANSWER 22 OF 23 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1992:522021 CAPLUS
DN 117:122021
TI Synthesis and thermal properties of mesomorphic 1,1'-bis[ω -(4'-cyano-4-biphenyloxy)alkyl]ferrocenes
AU Bhatt, J.; Fung, B. M.; Nicholas, Kenneth M.
CS Dep. Chem. Biochem., Univ. Oklahoma, Norman, OK, 73019, USA
SO Liquid Crystals (1992), 12(2), 263-72
CODEN: LICRE6; ISSN: 0267-8292
DT Journal
LA English
AB A new series of 1,1'-disubstituted ferrocene compds. of the type [$(\eta_5\text{-C}_5\text{H}_4\text{(CH}_2\text{)}_n\text{OC}_6\text{H}_4\text{C}_6\text{H}_4\text{CN})_2\text{Fe}$ (3a-d, n = 5, 6, 8, 11) incorporating a variable length alkyloxy cyanobiphenyl unit was prepared and their mesomorphic properties were investigated. Compds., 3b, c and d exhibit a thermotropic smectic C phase and 3c also exhibits a monotropic smectic A phase over a fairly wide range near ambient temperature

L8 ANSWER 23 OF 23 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1990:554799 CAPLUS
DN 113:154799
TI Ferrocene derivatives, surfactants containing them, and manufacture of organic thin films
IN Hiroi, Yoshio; Sakaeda, Noboru; Yokoyama, Seiichiro
PA Idemitsu Kosan Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 19 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

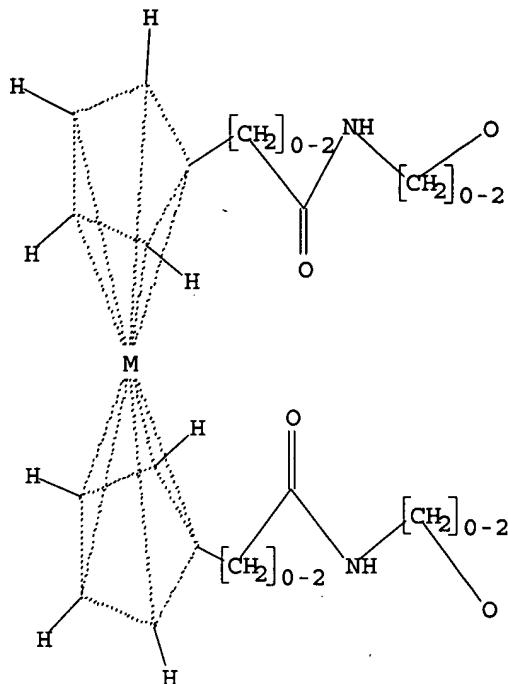
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 02083387	A	19900323	JP 1988-233798	19880920 <-
PRAI	JP 1988-233798		19880920		
OS	MARPAT 113:154799				

AB Hydrophobic organic substances solubilized in aqueous media in the presence of ferrocene derivs. such as 1,1'-ferrocenedibutyric acid polyethylene glycol diesters (I) and micelle solns. of electrolyte deposit thin films of hydrophobic organic substances on electrodes. Thus, a micelle solution containing I and phthalocyanine was electrolyzed to deposit a thin film on an ITO transparent glass anode.

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BATCH **COMPLETE**
PROJECTED ITERATIONS: 78336 TO 86024
PROJECTED ANSWERS: 0 TO 0

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FULL SCREEN SEARCH COMPLETED - 81734 TO ITERATE

100.0% PROCESSED 81734 ITERATIONS 9 ANSWERS
SEARCH TIME: 00.00.01

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FULL ESTIMATED COST		172.55	172.76

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L4      5 L3

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L4 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2006:880694 CAPLUS
 DN 145:451157
 TI Design and Synthesis Of Ferrocene Probe Molecules for Detection by Electrochemical Methods
 AU Tranchant, Isabelle; Herve, Anne-Cecile; Carlisle, Stephen; Lowe, Phillip; Slevin, Christopher J.; Forssten, Camilla; Dilleen, John; Williams, David E.; Tabor, Alethea B.; Hailes, Helen C.
 CS Department of Chemistry, University College London, London, WC1H 0AJ, UK
 SO Bioconjugate Chemistry (2006), 17(5), 1256-1264
 CODEN: BCCHE; ISSN: 1043-1802
 PB American Chemical Society
 DT Journal
 LA English
 AB A series of ferrocenyl conjugates to fatty acids have been designed and synthesized to establish the key properties required for use in biomol. binding studies. Amperometric detection of the ferrocene conjugates was sought in the region of 0.3 V (vs. Ag/AgCl) for use in protein/blood solns. Different linkers and solubilizing moieties were incorporated to produce a conjugate with optimal electrochem. properties. In electrochem. studies, the linker directly attached to the ferrocene was found to affect significantly the E_{1/2} value and the stability of the ferrocenium cation. Ester-linked ferrocene conjugates had E_{1/2} ranging from +400 to +410 mV, while amide-linked compds. ranged from +350 to +370 mV and the amines +260 to +270 mV. Folding of long-chain substituents around the ferrocene, also significantly affected by the choice of linker, was inferred as a secondary effect that increased E_{1/2}. The stability of the ferrocenium cation decreased systematically as E_{1/2} increased. Disubstituted ferrocene ester and amide conjugates, with oxidation potentials of +640 and +570 mV, resp., showed only a barely discernible reduction wave in cyclic

voltammetry at 50 mV/s. Electrochem. measurements identified two lead compds. with the common structural characteristics of an amide and carbamate linker (compds. 17 and 21) with a C11 fatty acid chain attached. It is envisaged that such mols. can be used to mimic and study the biomol. binding interaction between fatty acids and mols. such as human serum albumin.

RE.CNT 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2005:226663 CAPLUS
DN 143:347260
TI Preparation and hydrogen bonding in ferrocenecarboxamides substituted with 2-hydroxyethyl groups at the amide nitrogen atoms
AU Stepnicka, Petr; Cisarova, Ivana
CS Department of Inorganic Chemistry, Faculty of Science, Charles University, Prague, 12840, Czech Rep.
SO CrystEngComm (2005), 7, 37-43
CODEN: CRECF4; ISSN: 1466-8033
URL: <http://pubs.rsc.org/ej/CE/2005/b417062h.pdf?&Yr=2005&VOLNO=%26nbsp%3B%3Cb%3E7%3C%2Fb%3E%26nbsp%3B&Fp=37&Ep=43&JournalCode=CE&Iss=4>
PB Royal Society of Chemistry
DT Journal; (online computer file)
LA English
OS CASREACT 143:347260
AB The ferrocenecarboxamides, N-(2-hydroxyethyl)ferrocenecarboxamide (1a), N,N-bis(2-hydroxyethyl)ferrocenecarboxamide (1b), N,N'-bis(2-hydroxyethyl)ferrocene-1,1'-dicarboxamide (2a), and N,N,N',N'-tetrakis(2-hydroxyethyl)ferrocene-1,1'-dicarboxamide (2b) were synthesized by amidation of the resp. ferrocenecarboxylic acids, characterized by spectral methods including variable-temperature NMR spectroscopy, and their crystal structures were determined by single-crystal x-ray diffraction anal. In the solid-state, the amides associate predominantly via two-center O-H...O and N-H...O hydrogen bonds with a support from the softer C-H...O interactions. The supramol. aggregation takes various forms, ranging from infinite one-dimensional hydrogen-bonded chains (1a) and ladder-like arrays (1b) to complicated three-dimensional networks (2a and 2b), and its complexity apparently increases with the number of the potential hydrogen bond donor and acceptor groups present in the mol.

RE.CNT 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2002:149397 CAPLUS
DN 137:149219
TI Synthesis and characterization of rare earth metal complexes of 1,1'-ferrocenediacetyl hydroxylamine
AU Fan, Rui-lan; Bian, Zhan-xi; Li, Bao-guo; Jiang, Yu-li
CS College of Chemistry and Chemical Engineering, NeiMongol University, Hohhot, 010021, Peop. Rep. China
SO Neimenggu Daxue Xuebao, Ziran Kexueban (2002), 33(1), 53-56
CODEN: NDZKEJ; ISSN: 1000-1638
PB Neimenggu Daxue Xuebao Bianjibu
DT Journal
LA Chinese
OS CASREACT 137:149219
AB Seven complexes $\text{Ln}(\text{FcCH}_2\text{CONHO})_2\text{Cl}\cdot n\text{H}_2\text{O}$ ($\text{Ln} = \text{La, Ce, Pr, Nd, Sm, Eu, Gd}$; $n = 2-4$) were synthesized by reaction of rare earth metal(III) chlorides with 1,1'-ferrocenediacetyl di(hydroxylamine) which was obtained by the reaction of 1,1'-ferrocenediacetyl chloride with hydroxylamine. The structures were characterized by elemental anal., IR and ^1H NMR spectra.

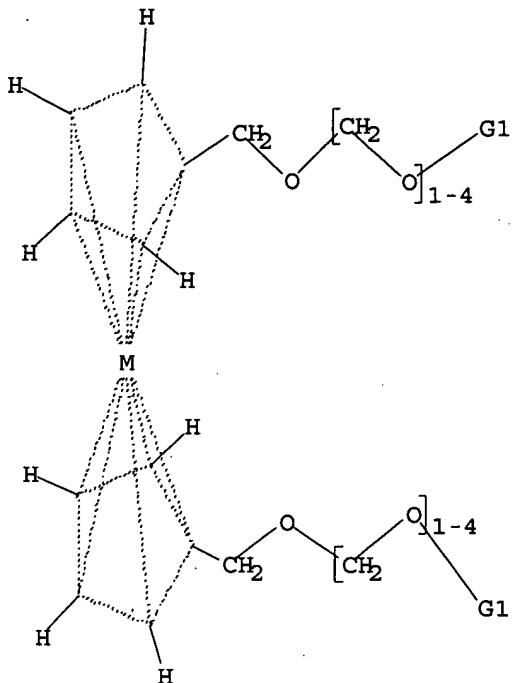
L4 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2002:140315 CAPLUS
DN 136:386309
TI Ferrocene-containing carbohydrate dendrimers
AU Ashton, Peter R.; Balzani, Vincenzo; Clemente-Leon, Miguel; Colonna, Barbara; Credi, Alberto; Jayaraman, Narayanaswamy; Raymo, Francisco M.; Stoddart, J. Fraser; Venturi, Margherita
CS School of Chemistry, University of Birmingham, Birmingham, B15 2TT, UK
SO Chemistry--A European Journal (2002), 8(3), 673-684
CODEN: CEUJED; ISSN: 0947-6539
PB Wiley-VCH Verlag GmbH
DT Journal
LA English
OS CASREACT 136:386309
AB Aliphatic amines, incorporating one or three (branched) acylated β -D-glucopyranosyl residues, were coupled with the acid chloride of ferrocenecarboxylic acid and with the diacid chloride of 1,1'-ferrocenedicarboxylic acid to afford four dendrimer-type, carbohydrate-coated ferrocene derivs. in good yields (54 - 92%). Deprotection of the peracylated β -D-glucopyranosyl residues was achieved quant. by using Zemplen conditions, affording four water-soluble ferrocene derivs. When only one of the two cyclopentadienyl rings of the ferrocene unit is substituted, strong complexes are formed with β -cyclodextrin in H₂O, as demonstrated by liquid secondary ion mass spectrometry (LSIMS), ¹H NMR spectroscopy, electrochem. measurements, and CD spectroscopy. Mol. dynamics calcns. showed that the unsubstituted cyclopentadienyl ring is inserted through the cavity of the toroidal host in these complexes. The electrochem. behavior of the protected and deprotected ferrocene-containing dendrimers was investigated in acetonitrile and water, resp. The diffusion coefficient decreases with increasing mol. weight
of the compound. The potential for oxidation of the ferrocene core, the rate constant of heterogeneous electron transfer, and the rate constant for the energy-transfer reaction with the luminescent excited state of the [Ru(bpy)₃]²⁺ complex (bpy = 2,2'-bipyridine) are strongly affected by the number (one or two) of substituents and by the number (one or three) of carbohydrate branches present in the substituents. These effects are assigned to shielding of the ferrocene core by the dendritic branches. Electrochem. evidence for the existence of different conformers for one of the dendrimers in aqueous solution was obtained.
RE.CNT 141 THERE ARE 141 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT
L4 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1995:930302 CAPLUS
DN 124:117565
TI Synthesis, structure and anion co-ordination chemistry of a novel macrocyclic cobaltocenium receptor
AU Beer, Paul D.; Drew, Michael G. B.; Hodacova, Jana; Stokes, Sally E.
CS Inorg. Chem. Lab., Univ. Oxford, Oxford, OX1 3QR, UK
SO Journal of the Chemical Society, Dalton Transactions: Inorganic Chemistry (1995), (21), 3447-53
CODEN: JCCTBI; ISSN: 0300-9246
PB Royal Society of Chemistry
DT Journal
LA English
AB A new macrocyclic amide-substituted cobaltocenium receptor, 1,1'-[(ethylenedioxy)bis(ethyleneaminocarbonyl)]cobaltocenium hexafluorophosphate 2 has been prepared and its single-crystal x-ray structure determined. Proton NMR anion co-ordination studies revealed that 2 and other new acyclic cobaltocenium derivs. complex chloride and bromide anions with 1:1 stoichiometry. Comparative stability constant evaluations imply that the macrocyclic receptor 2 forms halide complexes of greatest thermodn. stability, suggestive of a 'macrocyclic anion effect'. Cyclic

voltammetric investigations showed the cobaltocenium receptors to electrochem. recognize halide anions.

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FILE 'REGISTRY' ENTERED AT 17:32:47 ON 22 MAR 2007
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L1 STR



G1 H,A

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SEARCH TIME: 00.00.01

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PROJECTED ANSWERS: 0 TO 0

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